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MAY - 5 1994

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of)
)
Amendment of the Commission's)
Rules to Establish Rules and)
Policies Pertaining to a)
Mobile Satellite Service)
in the 1610-1626.5/2483.5-2500 MHz)
Frequency Bands)

CC Docket No. 92-166

COMMENTS

WESTINGHOUSE ELECTRIC CORPORATION hereby submits its comments to the Notice of Proposed Rulemaking (the "Notice") in the above-captioned proceeding, in which the Commission proposes rules and policies governing the Mobile Satellite Service Above 1 GHz.

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INTRODUCTION

Westinghouse Electric Corporation continues a one hundred year tradition as one of the leading industrial concerns in the United States. In the past century since George Westinghouse's pioneering work in power generation and alternating current, Westinghouse has developed core businesses in Broadcasting, Power Generation, Environmental Engineering, and Electronic Systems. Today Westinghouse employs more than 55,000 people worldwide with annual sales over \$8 billion. As part of Electronic Systems core business, Westinghouse has become the leading supplier of Mobile Satellite Service ground network infrastructure and terminals. Westinghouse is a prime contractor for the American Mobile Satellite Corporation's MSAT Ground Segment as well as for its Canadian counterpart, TMI Communication. Westinghouse is the only authorized U.S. manufacturer of MSAT Mobile Terminals. As a result of the MSAT experience, Westinghouse won contracts with OPTUS for the Australian MobileSat Terminal development. Since 1991, Westinghouse has made ground breaking advances in Terminal miniaturization and ground network integration with cellular systems. Westinghouse's success in the Mobile Satellite Service arena is best highlighted by the fact that during the course of the past three years, Westinghouse Mobile Communications has grown from zero to a \$150 million per year business.

Westinghouse believes in the need for affordable global ubiquitous telecommunications services. Furthermore, Westinghouse is excited by the opportunity to lead in the development of an industry of such great importance to the United States. Over the past several years, Westinghouse has committed significant resources to become the leading developer and systems integrator of Ground Networks for both synchronous and non-synchronous Mobile Satellite Services.

Westinghouse's comments are intended to ensure the Commission understands the importance of expediting an equitable grant of licenses that will pave the way for both the timely introduction of Ellipso services in the U.S. and abroad. Westinghouse will gladly offer to provide further technical support for the proceedings should the Commission deem such support desirable.

II

WESTINGHOUSE INVOLVEMENT IN ELLIPSO SYSTEM

In line with the strategy to become the preeminent Mobile Satellite Service infrastructure provider, Westinghouse fought aggressively to win the Ellipso Ground Network development contract, and was selected by Mobile Communications Holdings Incorporated to be the prime contractor for the Ellipso Ground Network in December 1993.

Westinghouse analysis of all competing non-synchronous solutions clearly shows that the Ellipso is one "Big LEO/MEO" that optimizes both a feature rich service and low deployment cost as well as early market entry. Via fewer, less complicated satellites, that can be incrementally deployed in elliptical orbits, the Ellipso System has clear coverage, capacity and business advantages. The Ellipso System does not bypass the PSTN, and therefore shall meet with greater international acceptance by worldwide PTTs. The projected monthly fees and per minute charges (\$.50/min) are the lowest of any proposed system, and most closely align with current cellular fees. Westinghouse believes the worldwide market acceptance will continue to be both price and quality sensitive. To ensure the success of the Ellipso effort, and support of the pre-licensing development, Westinghouse has committed several million dollars and the support of more than twenty engineers on the development project.

III

IMPORTANCE OF BIG LEO PROCEEDING TO U.S. INDUSTRY

Timely "Big LEO/MEO" licensing is critical to Westinghouse Mobile Communications. System development, integration, and worldwide installation of these systems require firm commitments to scores of subcontractors to ensure smooth development and rollout of service. Using MSAT experience as a recent example, development and deployment of systems such as Ellipso will employ as many as 300-500 highly skilled engineers and technicians. In today's highly competitive environment, maintaining a large cadre of highly skilled employees can be a daunting task. Furthermore, full project funding and licensing are inexorably intertwined. Investor confidence, therefore, will be significantly bolstered by a rapid favorable closure of the Proceedings.

Currently, all of the viable Big LEO/MEO systems are backed, sponsored or being developed by U.S. corporations. This fact is a clear indication as to the commitment and competitive lead U.S. satellite telecommunications companies have in the Mobile Satellite Service market. Westinghouse assessments of the MSS service and product market indicate that by the year 2004 annual revenues for the industry will be between \$20-30 billion. As a satellite ground infrastructure provider, Westinghouse views MSS technology as being a key component

to advancing the quality of life and growth of the developing countries world wide. The U.S. is currently poised to dominate these markets, given timely resolution of licensing matters.

Westinghouse fully believes that the global market opportunity is substantial enough to support all of the viable Big LEO\MEO systems as well as a number of regional GEOs. Therefore, significant flexibility should be afforded the applicants such that maximum creativity can be used in entering the market. Experience has shown that consumer preference and open competition are the best mechanisms to ensure that only the best value/services survive.

IV

WESTINGHOUSE SUPPORTS THE PROPOSED SHARING PLAN

Westinghouse fully supports the spectrum sharing plan as currently proposed with one exception. Westinghouse believes that should the TDMA applicant not be licensed or drop out, all of the available bands should be shared by the CDMA applicants. Currently, the NPRM does not so provide. Additionally, Westinghouse believes that if only one CDMA applicant is licensed, then the available band should be evenly split between the TDMA and CDMA applicants.

As previously stated, certainty that the requested bands will be available for the foreseeable future to the applicants is a paramount consideration for potential investors and the entire industry. Every effort must be made by the Commission to provide rules that facilitate and accelerate the global licensing and acceptance of non-synchronous MSS systems.

Since all proposed systems are truly oriented at the global marketplace, foreign involvement, investment and partnerships are absolutely necessary for smooth market entry. This reality dictates a flexible set of rules that ensures a highly favorable view of foreign participation, and/or substantial equity ownership in the proposed systems. International alliances are a healthy and important component in building equitable trade conditions in developing countries, the key market of the 21st century.

CONCLUSION

For the reasons set forth herein, Westinghouse Electric Corporation urges the Commission to move forward expeditiously with adoption of rules for MSS Above 1 GHz which provide flexibility for system operators to implement their market and technical visions.

Respectfully submitted,

WESTINGHOUSE ELECTRIC CORPORATION

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